Amendments To Claims

Claims 1-29 (cancelled).

30.   (New) A system for adapting threads support to an underlying platform, comprising:

   virtual machine that enables execution of an application program on the underlying platform, the virtual machine having a threads interface layer that provides a standard threads interface for a set of threads associated with the application program such that the standard threads interface does not depend on the underlying platform;

   native threads interface layer that provides a threads interface that is adapted to the underlying platform such that a set of routines in the threads interface layer use a set of routines in the native threads interface layer to support the threads.

31.   (New) The system of claim 30, wherein the native threads interface layer is adapted to an operating system of the underlying platform.

32.   (New) The system of claim 31, wherein the native threads interface layer is adapted to use a set of thread support routines provided by the operating system.

33.   (New) The system of claim 31, wherein the native threads interface layer is adapted to use a set of routines provided by the operating system that perform equivalent functions of functions in the native threads interface layer.

34.   (New) The system of claim 30, wherein the native threads interface layer is adapted to a hardware architecture of the underlying platform.

- 2 -

35. (New) The system of claim 30, wherein the standard threads interface is a Java threads class.

36. (New) The system of claim 30, wherein the routines in the threads interface layer maintain a set of context information for each thread in terms of the virtual machine.

37. (New) The system of claim 30, wherein the routines in the native threads interface layer maintain a set of context information for each thread in terms of the underlying platform.

38. (New) The system of claim 30, wherein the native threads support routines include a routine for suspending a particular thread.

39. (New) The system of claim 30, wherein the native threads support routines include a routine for resuming a particular thread.

40. (New) The system of claim 30, wherein the native threads support routines include a routine for waiting for completion of a particular thread.

41. (New) The system of claim 30, wherein the native threads support routines include a routine for yielding execution to another thread.

42. (New) The system of claim 30, wherein the native threads support routines include a routine for stopping execution of a particular thread and for cleaning up a set of strictures associated with the particular thread.

43. (New) The system of claim 30, wherein the native threads support routines include a routine for setting a priority of a

- 3 -

particular thread.

44. (New) The system of claim 30, wherein the native threads support routines include a routine for obtaining a priority of a particular thread.

45. (New) The system of claim 30, wherein the native threads support routines include a routine for obtaining an identifier of a currently executing thread.

46. (New) The system of claim 30, wherein the native threads support routines include a routine for selecting a particular thread for execution.

47. (New) A method for adapting threads support in a virtual machine to an underlying platform, comprising the steps of:

providing a threads interface layer having a standard threads interface in the virtual machine for a set of threads associated with an application program that executes under the virtual machine such that the standard threads interface does not depend on the underlying platform;

providing a native threads interface layer having a threads interface that is adapted to the underlying platform such that a set of routines in the threads interface layer use a set of routines in the native threads interface layer to support the threads.

48. (New) The method of claim 47, wherein the step of providing a native threads interface layer includes the step of adapting the native threads interface layer to an operating system of the underlying platform.

49. (New) The method of claim 48, wherein the step of adapting the native threads interface layer to an operating system includes the step of adapting the native threads

- 4 -

interface layer to use a set of thread support routines provided by the operating system.

50. (New) The method of claim 48, wherein the step of adapting the native threads interface layer to an operating system includes the step of adapting the native threads interface layer to use a set of routines provided by the operating system that perform equivalent functions of functions in the native threads interface layer.

51. (New) The method of claim 47, wherein the step of providing a native threads interface layer includes the step of adapting the native threads interface layer to a hardware architecture of the underlying platform.

52. (New) The method of claim 47, wherein the step of providing a threads interface layer having a standard threads interface includes the step of providing a Java threads class.

- 5 -